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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,864	11/12/2003	Theodore Nicolas Schmitt	SCHMITT-16	6707
20151	7590	05/08/2006	EXAMINER	
HENRY M FEIEREISEN, LLC			EDWARDS, NEWTON O	
350 FIFTH AVENUE			ART UNIT	
SUITE 4714			PAPER NUMBER	
NEW YORK, NY 10118			1774	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/706,864	<b>Applicant(s)</b> SCHMITT ET AL.	
	<b>Examiner</b> N Edwards	<b>Art Unit</b> 1774	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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1. Applicant's arguments filed 3/13/06 have been fully considered but they are not persuasive.

Applicant states that 1) thermal expansion is defined in US 6,186,768 but said nothing about his amendments to the spec and claim 1.

Simply put, your amendments to spec and claim 1 filed 3/13/06 is **New Matter**, see below.

Applicant argues the 2 ) 112 rejection by citing case law and states page 12-14 are illustrative for the type of fibers used in the reinforcement component.

The case law cited is neither on point with the facts of the instant case, nor is it the standard of review for the issue at hand. To conclude that page 12-14 of the spec ( or the spec as a whole) examples 1-11 of **ONE element in each example** for a composite would enable a person skilled in the art so as to obtain the claimed thermal expansion, thermal conductivity, and density without out undue experimentation is not persuasive.

2. The amendment filed 3/13/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Page 4 (Summary of the Inventions) paragraph 009 "2 times 10 – 6" is New Matter . Page 10 paragraph 0025 "2 times 10 power 6" is New Matter .

Applicant is required to cancel the new matter in the reply to this Office Action.

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification as filed is objected to for failing to provide 1) an adequate written description of the invention and 2) failing to provide an enabling disclosure.

The specification as filed fails to set forth 1) any written description of how to make the claimed heat dissipating structure of claim 1 so as to obtain the claimed the thermal expansion coefficient, thermal conductivity, and density without undue experimentation. The specification not only fails to provide written support for the matrix of the composite in claim 1, it also fails to give any guidance or direction in pages 12-14 of spec of which combination of components yield the claimed properties of claim 1. The examples of page 12-14 spec cannot enable any person skill in the art to make the claimed composite (which is a combination of elements) since every example has no more than ONE element. The spec also fails to tell the nature of the invention, in view of the scope and breath of the claims, for example which metal or polymer or resin is combined with which reinforcement component which contain microfibers, is combined with which nanofibers so as to obtain the claimed thermal expansion, thermal conductivity, and volume mass (density ) without undue experimentation. The predictability of the art of which combination of components in a composite would yield the claimed density , thermal conductivity, and thermal expansion coefficient is very low.

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Claims 1-44 are rejected under 35 USC 112, first paragraph, for the reasons given in the objection above.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 line 3 Lower limit "2 X 10 – 6" is New Matter.

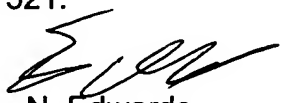
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Primary Examiner Edwards at telephone number 571-272-1521.



N Edwards  
Primary Examiner  
Art Unit 1774